

Amendments to the Specification:

Please make the following changes to the Substitute Specification filed December 14, 2001.

On pages 3 and 4, the paragraph beginning on line 20 on page 3 and continuing to line 10 on page 4 should be replaced with the following amended paragraph:

The idea of the invention is that the radioactive waste that is to be disposed of, particularly the radioactive reactor graphite that is to be disposed of, after being ground or crushed, replaces aggregates and additives in appropriate binder or aggregate formulations for producing casting or embedding mortars for waste conditioning. It is essential to the invention that the proportion of fines in the material to be disposed of, for example, in the graphite, is small, i.e., that the proportion having an average grain size of < 250 μm amounts to less than 30 wt.%. Surprisingly, it has been shown that when the proportion of fines is reduced, the compressive strength of cement-bonded materials, which are produced for the disposal of radioactive wastes, could be considerably improved, most likely since too great a proportion of fines produces a certain lubricating effect, which leads to unacceptable, low compressive strengths.

On pages 4 and 5, the paragraph beginning on line 21 on page 4 and continuing to line 10 on page 5 should be replaced with the following amended paragraph:

The disposal of radioactive reactor graphite is thus accomplished by grinding wet, followed by complete substitution of additives such as sand and/or gravel and/or additives in the ~~cement~~ bound ~~cement-bound~~ material such as cement mortar and concrete, which are used for example in the form of a graphite/cement mortar matrix for filling otherwise waste-laden containers, such as containers and the like. As a result of this conditioning of the waste material, complete elimination of the otherwise resulting volume of waste created when radioactive reactor graphite is solidified, which would then be present alone or with other radioactive waste products as a finally conditioned drum of waste, is achieved. This method of graphite disposal is associated with considerable savings of expense from the financial standpoint, since otherwise high disposal costs would result from additional drums to be generated followed by storage.

On page 11, Table 2 at the bottom of the page should be replaced with the following amended Table 2:

Table 2

Screen mesh Diameter	Passage through the screen			
[mm]	[wt.%]	[wt.%]	[wt.%]	[wt.]
60,000 <u>60.000</u>	0	0	0	100.0
30,000 <u>30.000</u>	0	0	100.0	70.6
15,000 <u>15.000</u>	0	100.0	70.8	50.0
6000 <u>6.000</u>	100.0	63.2	44.8	31.6
4000 <u>4.000</u>	81.2	51.3	36.3	25.7

<u>20002.000</u>	58.2	36.8	26.1	18.4
<u>10001.000</u>	39.2	24.8	17.6	12.4
0.500	27.7	17.5	12.4	8.8
0.250	19.4	12.2	8.7	6.1
0.125	12.5	7.9	5.6	3.9
0.00	0.0	0.0	0.0	0.0

On page 12, the paragraph at the top of the page should be replaced with the following amended paragraph:

As is clearly discernible from the four formulations, the recipe can include much ~~less~~more graphite when a maximum grain size of up to 60 mm is used, i.e., approx. 70% more than with a maximum grain size of the graphite of 6 mm. What formulation finally is used for casting further radioactive waste, depends on the “bulkiness” or the dimensions of these waste products as well as the order of magnitude of load of the graphic/cement mortar material. The greater the maximum grain size of the graphite in the mortar recipe, the higher is the graphite loading of the formulation.